September 2009 Update
New Bedford Harbor Superfund Site
New Bedford, Massachusetts

Site Description

The New Bedford Harbor Superfund site was placed on the Superfund National Priorities List (NPL) in 1983 due to the presence of high levels of polychlorinated biphenyls (PCBs) in sediment. From the 1940s until EPA's PCB ban in the 1970s, facilities associated with the production of electrical devices discharged industrial wastes containing PCBs directly and indirectly into the harbor. Most of the PCBs were released from the now-vacant Aerovox capacitor plant in New Bedford. As a result, PCBs contaminate the Harbor in varying degrees for at least six miles, from the Acushnet River Estuary into Buzzards Bay. A five acre northern portion of the Acushnet River Estuary contaminated with high levels of PCBs (the "hot spot" area) was dredged in 1994 and 1995. Bioaccumulation of PCBs within the marine food chain and health risks from consuming PCB-contaminated seafood has resulted in closing the entire 18,000 acre site area to lobstering and fishing since 1979. Recreational activities and harbor development have been limited by the widespread PCB problem. It is estimated that there are approximately 900,000 cubic yards of highly PCB-contaminated sediment covering roughly 260 acres which require removal per EPA's selected cleanup plan. EPA has implemented an innovative "Fish Smart" outreach campaign implemented to educate high risk populations about the risks of fish and shellfish consumption from the Harbor. New Bedford has been identified as an Environmental Justice area.

To date, approximately 190,000 cubic yards of the most highly contaminated sediments and shoreline soils, backyards and salt marshes have been remediated. Full scale dredging, dewatering and disposal operations began in 2004. Dredging operations typically are conducted approximately 40 days per year based on $15 million per year of Superfund funding. In 2005, EPA partnered with the City and state on a pilot underwater cap in conjunction with a navigational dredging project, saving an estimated $15 million and accelerating the cleanup of sediments near the Cornell-Dubilier mill, another past source of contamination. EPA is currently evaluating alternative long-term approaches to the cleanup, including use of confined aquatic disposal (CAD) cells to significantly reduce both the cost and time to complete the remedy. CAD cells are large excavations (or existing depressions) in the harbor bottom into which contaminated sediments are placed and capped.

For more information on this site, please see www.epa.gov/ne/nbh

Recovery Act Project Information

Thirty ($30) million dollars in Recovery Act funding is being used to supplement the funding for the ongoing dredging efforts. While the entire cleanup effort will need to carry on afterwards, the Recovery Act funding has had a number of positive impacts on this cleanup and the local community. First and foremost, additional funding will allow dredging of larger volumes of contaminated sediment from the highly contaminated upper harbor. This focus will help minimize recontamination of areas of the harbor that have already been remediated such as the area north of Wood Street. Over the next two years, EPA will expand its "dredging season" from the current 40 days/year (or approximately two months/year) to six months in 2009 and five months in 2010. EPA typically dredges approximately 20,000 to 25,000 cubic yards per year with an annual funding rate of $15 million. This year, 30,000 cubic yards have already been dredged and it is estimated that approximately 60,000 cubic yards will be dredged, processed and disposed off-site by the end of the season. Weather does not permit dredging in the winter months. Under the present funding scenario, this stimulus funding will accelerate the cleanup by about three years.

With the increased area dredged due to the Recovery Act funding, this will help facilitate the reuse of clean "bottom-of-CAD" material from the City's next navigational CAD cell for backfilling the areas dredged to date in the upper harbor. This will serve to increase the protectiveness of the remedy since residual PCB levels will be significantly decreased where backfill material is placed, as well as avoid the offshore disposal of this clean CAD cell material.

Accelerating portions of the cleanup will also facilitate the City's plans to develop shoreline public access, recreational boating, competitive rowing, and wetland restoration in the upper and lower harbor areas.

In addition, EPA has been able to employ a total of 100 people for this season, with approximately 35% local hiring. The local economy has also benefitted as EPA keeps track of these expenditures. Since full scale dredging began in 2004, the project has enhanced the local economy by approximately $13 million. This year's and next year's extended dredging seasons will substantially add to local hiring and the local economy.